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EXAMINER

SMITHERS, MATTHEW

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/372,170

Applicant(s)

CHAINER ET AL.

Examiner

Matthew B Smithers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49 is/are allowed.
- 6) ☒ Claim(s) 1-6, 14, 19-31 and 35-48 is/are rejected.
- 7) ☒ Claim(s) 7-13, 15-18 and 32-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☐ Interview Summary (PTO-413) Paper No(s). _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed September 25, 2003 have been fully considered but they are not persuasive.

Applicant argues independent claims 1, 37 and 39 have the advantage of a subject being authenticated without sharing the biometric data with an external comparison device.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the subject can be authenticated without sharing the biometric data with an external comparison device) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant suggests the language of "without sharing any of the subject's biometric data" clearly conveys the idea of the subject being authenticated without sharing the biometric data with an external comparison device. Examiner contends the language does not clearly convey that idea. More specifically, page 5, lines 13-17 of applicant's specification, appears to be different from what applicant is arguing in that the section appears to be focused on preventing a party who is requesting authentication from gaining the authentication information, while the amendment is

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focused on preventing an external device performing an authentication comparison from acquiring the subject's biometric data. Because of the above the language is not clearly conveying applicant's inventive concept.

Applicant argues there is no suggestion or teaching of maintaining confidentiality and withholding authentication information from another party. Examiner contends Burger does teach preventing hacking and sniffing of authentication information while the information is being compared by not allowing any communication to or from a remote location (CPU) or any other device (see column 6, lines 1-8).

For the above reasons, the examiner maintains the rejections given below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claims 1-3, 5-6, 14, 20, 24-27, 30, 31, 35, 37, 39-45, 47 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 6,219,439 granted to Burger.

Regarding claim 1, Burger meets the claimed limitations as follows:

"A method of authenticating a subject, comprising: using one or a plurality of biometric measurements for authentication without any sharing of the subject's biometric data." see column 5, line 66 to column 6, line 8 and column 6, lines 63-67.

Regarding claim 2, Burger meets the claimed limitations as follows:

"The method according to claim 1, further comprising: storing said biometric data in an individual unit, said individual unit belonging to said subject." see column 6, lines 39-42.

Regarding claim 3, Burger meets the claimed limitations as follows:

"The method according to claim 2, wherein said individual unit is portable for being carried by said subject." see column 4, lines 34-42.

Regarding claim 5, Burger meets the claimed limitations as follows:

"The method according to claim 2, wherein said individual unit comprises one of a smart card, a personal area network (PAN) tool, and an apparatus linked to a network." see column 6, lines 14-34.

Regarding claim 6, Burger meets the claimed limitations as follows:

"The method according to claim 1, further comprising:
after said authentication, selectively obtaining access to any of a location, a service, and an option in a service by said subject." see column 6, lines 39-51 and column 8, lines 16-34.

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Regarding claim 14, Burger meets the claimed limitations as follows:

"A method of authenticating a characteristic of a subject, without compromising privacy of the subject, comprising: using at least one of a plurality of authentication methods including personal information of the subject, a biometric of the subject, a password, a personal identification number (PIN) and a secured component; and simultaneously with said using, said subject maintaining confidentiality of authentication information and withholding said authentication information from the other party." see column 5, line 66 to column 6, line 8 and column 6, lines 63-67.

Regarding claim 20, Burger meets the claimed limitations as follows:

"A method for secure authentication of a subject, comprising: selectively requesting any of a password and a knowledge-based information from said subject; and simultaneously with said selectively requesting, interrogating biometric information of the subject, said biometric information being carried by said subject." see column 5, line 66 to column 6, line 8 and column 6, lines 63-67.

Regarding claim 24, Burger meets the claimed limitations as follows:

"The method according to claim 20, wherein a device is carried by the subject to be authorized to perform a task, wherein at a moment of authorization, said device is presented to a reader of an authorizing machine of an entity seeking authentication, which prompts said device for a password for authorization to be given, and wherein said device reads a biometric of said subject using a sensor included in the device and computes the password." see column 5, lines 42-65.

Regarding claim 25, Burger meets the claimed limitations as follows:

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"The method according to claim 24, wherein said device allows the password to be read by the authorizing machine." see column 5, lines 42-65.

Regarding claim 26, Burger meets the claimed limitations as follows:

"The method according to claim 25, wherein said password is read in a contacting manner." see column 5, lines 50-55.

Regarding claim 27, Burger meets the claimed limitations as follows:

"The method according to claim 25, wherein said password is read in a contact-free manner." see column 5, lines 50-55.

Regarding claim 30, Burger meets the claimed limitations as follows:

"The method according to claim 24, further comprising: storing on the device information regarding a previous authentication including a biometric-print of the subject." see column 4, lines 5-13 and column 6, lines 39-47.

Regarding claim 31, Burger meets the claimed limitations as follows:

"The method according to claim 20, further comprising: encrypting a biometric-print using the subject's biometric and personal knowledge onto a device carried by said subject." see column 4, lines 5-13 and column 7, lines 1-3.

Regarding claim 35, Burger meets the claimed limitations as follows:

"An apparatus for secure authentication, without compromising privacy of a subject, comprising: a reader, associated with the subject, for reading a specified biometric of said subject; and a password generator for producing a password needed based on said biometric." see column 5, line 66 to column 6, line 8 and column 6, lines 63-67.

Regarding claim 37, Burger meets the claimed limitations as follows:

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"An apparatus for secure authentication, comprising: means, associated with a subject, for reading a specified biometric of said subject; and means for producing a password needed based on said biometric, without providing access to said biometric by anyone other than said subject." see column 5, line 66 to column 6, line 8 and column 6, lines 63-67.

Regarding claim 39, Burger meets the claimed limitations as follows:

"A method of identifying a subject, comprising: using one or a plurality of biometric measurements for identification without any sharing of the subject's biometric data." see column 5, line 42 to column 6, line 8 and column 6, lines 63-67.

Regarding claim 40, Burger meets the claimed limitations as follows:

"The method of claim 39, wherein a subject's identity is determined locally, under the subject's control, by having the subject provide at least one of a user ID and by biometric identification of the subject among enrolled authorized subjects, and wherein said identification produces a set of N best matches for N subsets, and an index formed by concatenation of the N indices uniquely identifies the subject." see column 5, lines 42-63.

Regarding claim 41, Burger meets the claimed limitations as follows:

"A method for identification of a subject, comprising: selectively requesting any of a password and a knowledge-based information from said subject; and simultaneously with said selectively requesting, interrogating biometric information of the subject, said biometric information being carried by said subject." see column 5, line 42 to column 6, line 8 and column 6, lines 63-67.

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Regarding claim 42, Burger meets the claimed limitations as follows:

“The method of claim 41, wherein a subject's identity is determined locally, under the subject's control, by having the subject provide at least one of a user ID and by biometric identification of the subject among enrolled authorized subjects, and wherein said identification produces a set of N best matches for N subsets, and an index formed by concatenation of the N indices uniquely identifies the subject.” see column 5, lines 42-63.

Regarding claim 43, Burger meets the claimed limitations as follows:

“An apparatus for identification of a subject, comprising: a reader, associated with the subject, for reading a specified biometric of said subject; and a password generator for producing a password needed based on said biometric.” see column 5, line 66 to column 6, line 8 and column 6, lines 63-67.

Regarding claim 44, Burger meets the claimed limitations as follows:

“The apparatus according to claim 43, further comprising: means for storing data of said biometric in an individual unit, said individual unit belonging to said subject.” see column 6, lines 39-42.

Regarding claim 45, Burger meets the claimed limitations as follows:

“The apparatus according to claim 44, wherein said individual unit is portable for being carried by said subject.” see column 4, lines 34-42.

Regarding claim 47, Burger meets the claimed limitations as follows:

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"The apparatus according to claim 44, wherein said individual unit comprises one of a smart card, a personal area network (PAN) tool, and an apparatus linked to a network."

see column 6, lines 14-34.

Regarding claim 48, Burger meets the claimed limitations as follows:

"The apparatus according to claim 44, wherein a subject's identity is determined locally, under the subject's control, by having the subject provide at least one of a user ID and by biometric identification of the subject among enrolled authorized subjects being read by said reader, and wherein said identification produces a set of N best matches for N subsets, and an index formed by concatenation of the N indices uniquely identifies the subject." see column 5, lines 42-63.

Claims 1-2, 4, 14, 19-23, 28-29, 35-44, 46 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 6,038,315 granted to Strait et al.

Regarding claim 1, Strait meets the claimed limitations as follows:

"A method of authenticating a subject, comprising: using one or a plurality of biometric measurements for authentication without any sharing of the subject's biometric data."

see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 2, Strait meets the claimed limitations as follows:

"The method according to claim 1, further comprising: storing said biometric data in an individual unit, said individual unit belonging to said subject." see column 3, lines 47-55 (. . . database . . .).

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Regarding claim 4, Strait meets the claimed limitations as follows:

"The method according to claim 2, wherein said individual unit is non-portable." see column 3, lines 47-55 and Figure 2.

Regarding claim 14, Strait meets the claimed limitations as follows:

"A method of authenticating a characteristic of a subject, without compromising privacy of the subject, comprising: using at least one of a plurality of authentication methods including personal information of the subject, a biometric of the subject, a password, a personal identification number (PIN) and a secured component; and simultaneously with said using, said subject maintaining confidentiality of authentication information and withholding said authentication information from the other party." see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 19, Strait meets the claimed limitations as follows:

"The method according to claim 14, further comprising: selectively completing the authentication with a remote service using a communication port and protocol." see column 6, lines 36-46.

Regarding claim 20, Strait meets the claimed limitations as follows:

"A method for secure authentication of a subject, comprising: selectively requesting any of a password and a knowledge-based information from said subject; and simultaneously with said selectively requesting, interrogating biometric information of the subject, said biometric information being carried by said subject." see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 21, Strait meets the claimed limitations as follows:

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"The method according to claim 20, further comprising: using said biometric information to generate said password." see abstract.

Regarding claim 22, Strait meets the claimed limitations as follows:

"The method according to claim 20, further comprising: performing biometric data verification by a device associated with said subject, wherein said biometric data verification activates a password controlled authentication mechanism which transfers information, but which withholds sufficient information so that the biometric is not revealed, to a party requiring authentication." see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 23, Strait meets the claimed limitations as follows:

"The method according to claim 21, wherein obtaining said password is performed by using at least one of an encryption and secure hashing." see column 2, lines 53-56 and column 5, line 37 to column 6, line 35.

Regarding claim 28, Strait meets the claimed limitations as follows:

"The method according to claim 24, further comprising: using one of a hashing and a mapping technique, which is stable with respect to variations of the biometric extracted, said using including mapping regions of a biometric-print space, to the password having been computed." see column 3, lines 5-64 and Figure 2.

Regarding claim 29, Strait meets the claimed limitations as follows:

"The method according to claim 28, wherein said using includes: measuring a biometric-print of the subject by ranking biometric prints of N subsets of M biometrics,

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wherein an index of a top ranking of each of the N subsets is used in computing the password.” see column 3, lines 5-64 and Figure 2.

Regarding claim 35, Strait meets the claimed limitations as follows:

“An apparatus for secure authentication, without compromising privacy of a subject, comprising: a reader, associated with the subject, for reading a specified biometric of said subject; and a password generator for producing a password needed based on said biometric.” see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 36, Strait meets the claimed limitations as follows:

“The apparatus according to claim 35, wherein said password generator includes an encryption device using at least one of encryption and secure hashing.” see column 2, lines 53-56 and column 5, line 37 to column 6, line 35.

Regarding claim 37, Strait meets the claimed limitations as follows:

“An apparatus for secure authentication, comprising: means, associated with a subject, for reading a specified biometric of said subject; and means for producing a password needed based on said biometric, without providing access to said biometric by anyone other than said subject.” see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 38, Strait meets the claimed limitations as follows:

“The apparatus according to claim 37, wherein said means for producing said password includes an encryption device using at least one of encryption and secure hashing.” see column 2, lines 53-56 and column 5, line 37 to column 6, line 35.

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Regarding claim 39, Strait meets the claimed limitations as follows:

"A method of identifying a subject, comprising: using one or a plurality of biometric measurements for identification without any sharing of the subject's biometric data." see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 40, Strait meets the claimed limitations as follows:

"The method of claim 39, wherein a subject's identity is determined locally, under the subject's control, by having the subject provide at least one of a user ID and by biometric identification of the subject among enrolled authorized subjects, and wherein said identification produces a set of N best matches for N subsets, and an index formed by concatenation of the N indices uniquely identifies the subject." see column 3, lines 5-64 and Figure 2.

Regarding claim 41, Strait meets the claimed limitations as follows:

"A method for identification of a subject, comprising: selectively requesting any of a password and a knowledge-based information from said subject; and simultaneously with said selectively requesting, interrogating biometric information of the subject, said biometric information being carried by said subject." see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 42, Strait meets the claimed limitations as follows:

"The method of claim 41, wherein a subject's identity is determined locally, under the subject's control, by having the subject provide at least one of a user ID and by biometric identification of the subject among enrolled authorized subjects, and wherein said identification produces a set of N best matches for N subsets, and an index formed

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by concatenation of the N indices uniquely identifies the subject.” see column 3, lines 5-64 and Figure 2.

Regarding claim 43, Strait meets the claimed limitations as follows:

“An apparatus for identification of a subject, comprising: a reader, associated with the subject, for reading a specified biometric of said subject; and a password generator for producing a password needed based on said biometric.” see column 2, lines 53-56; column 3, lines 44-64 and column 5, line 47 to column 6, line 11.

Regarding claim 44, Burger meets the claimed limitations as follows:

“The apparatus according to claim 43, further comprising: means for storing data of said biometric in an individual unit, said individual unit belonging to said subject.” see column 3, lines 47-55 (. . . database . . .).

Regarding claim 46, Strait meets the claimed limitations as follows:

“The method according to claim 2, wherein said individual unit is non-portable” see column 3, lines 47-55 and Figure 2.

Regarding claim 48, Burger meets the claimed limitations as follows:

“The apparatus according to claim 44, wherein a subject's identity is determined locally, under the subject's control, by having the subject provide at least one of a user ID and by biometric identification of the subject among enrolled authorized subjects being read by said reader, and wherein said identification produces a set of N best matches for N subsets, and an index formed by concatenation of the N indices uniquely identifies the subject.” see column 3, lines 5-64 and Figure 2.

Allowable Subject Matter

Claim 49 is allowed.

The following is an examiner's statement of reasons for allowance: The prior art, Burger (US 6,219,439) and Strait (US 6,038,315) fail to specifically teach an authenticating apparatus that has a biometric sensor, memory and comparator all on the same device and authenticates a subject by comparing the biometric stored in the memory to a biometric obtain during an authentication stage.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 7-13, 15-18, and 32-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 7-8, 12-13, and 15-18, the cited prior art fails to specifically teach generating at least one of a password and another authentication procedure based on biometric authentication locally under the subject's control.

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With respect to claims 9-11, the cited prior art fails to specifically teach generating at least one of a password and another authentication procedure based on at least one biometric feature extracted locally under the subject's control.

With respect to claims 27-, the cited prior art fails to specifically teach selectively completing the authentication with a remote service using a communication port and protocol.

With respect to claims 32 and 33, the cited prior art fails to specifically teach providing a unique non-duplicable authentication mechanism on a device associated with said subject, said authentication mechanism being constructed so as to be completely independent of the biometric, wherein said authentication mechanism is prevented from accessing the biometric itself.

With respect to claim 34, the cited prior art fails to specifically teach biometric information for a plurality of subjects is stored in a device associated with the subject.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B Smithers whose telephone number is (703) 308-9293. The examiner can normally be reached on Monday-Friday (9:00-5:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Matthew B Smithers
Primary Examiner
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